

Having described the invention, what is claimed is:

1. An electric brake actuator, including a rotatable member and electric drive means for driving said rotatable member to rotate, said rotatable member being arranged for engagement with a continuous cable that in use extends between and in connection with a pair of brake assemblies that are operable when actuated to apply a braking load to brake a wheel associated with each respective said brake assembly, said rotatable member being arranged such that it is operable to pull said cable on each side of said rotatable member upon rotation of said rotatable member in a first direction, for actuation of said brake assemblies, and to extend said cable on each side of said rotatable member upon rotation of said rotatable member in a second and reverse direction.
2. An electric brake actuator according to claim 1, said rotatable member including a pair of spaced apart bearing surfaces for bearing engagement by said cable and positioned so that the cable can extend from one said bearing surface to the other said bearing surface and away from each said bearing surface for extension respectively to said pair of brake assemblies.
3. An electric brake actuator according to claim 2, said pair of bearing surfaces being spaced apart symmetrically on opposite sides of the axis about which said rotatable member is driven to rotate.
4. An electric brake actuator according to claim 2, said bearing surfaces being curved.
5. An electric brake actuator according to claim 4, said bearing surfaces being curved at a constant and equal radius.
6. An electric brake actuator according to claim 1, said rotatable member being formed as a circular disc with a cable groove formed in the peripheral edge of the disc and being open radially, and with a passage formed through the disc and which opens at either end into the base

of the groove, said cable extending through the passage and into the cable groove at each end thereof.

7. An electric brake actuator according to claim 6, said passage being formed to extend diametrically through the rotational axis of the disc.

8. An electric brake actuator according to claim 6, said passage being formed as a bore.

9. An electric brake actuator according to claim 6, said passage being open and extending between or separating two sections of the rotatable member.

10. An electric brake actuator according to claim 1, said rotatable member including a pair of rollers rotatably mounted to a back plate, each of said rollers defining a cable bearing surface and said cable extending from one of said rollers to the other for extension respectively to said pair of brake assemblies.

11. An electric brake actuator according to claim 10, each of said rollers defining an annular groove for receipt of said cable therein.

12. An electric brake actuator according to claim 1, said rotatable member defining a three dimensional surface for engagement with said cable.

13. An electric brake actuator according to claim 12, said three dimensional surface defining a cable groove for receipt of said cable.

14. An electric brake actuator according to claim 13, said cable groove including a pair of joined, relatively reverse curving portions, each presenting a bearing surface on opposite sides of said groove for bearing engagement with said cable.

15. An electric brake actuator according to claim 14, said cable groove portions being generally semi-circular in lengthwise shape.
16. An electric brake actuator according to claim 12, said three dimensional surface being generally hemi-spherical.
17. An electric brake actuator according to claim 14, said rotatable member being formed as a circular disc with a cable groove formed in the peripheral edge of the disc and being open radially, and said three dimensional surface extending axially therefrom, said cable groove of said three dimensional surface intersecting at each end thereof with said peripheral edge cable groove, said intersection facilitating passage of said cable from said peripheral edge cable groove to said three dimensional surface cable groove at each end of said three dimensional surface cable groove.
18. An electric brake actuator according to claim 1, including mounting means for mounting said actuator to a vehicle, said mounting means permitting said actuator to shift in the direction of cable pull.
19. An electric brake actuator according to claim 18, said mounting means including a pair of spaced apart, substantially parallel plates which are connected at opposite ends to said actuator and said vehicle respectively so that the broad plane of each plate faces generally in the direction of cable pull.
20. An electric brake actuator according to claim 19, at least one of said plates being rigidly fixed to at least one of said actuator and said vehicle and being flexible in the direction of cable pull.

21. An electric brake actuator according to claim 19, at least one of said plates being hingedly connected to at least one of said actuator and said vehicle and being pivotable in the direction of cable pull.
22. An electric brake actuator according to claim 19, including biasing means for biasing said plates to return said actuator from a shifted condition.
23. An electric brake actuator according to claim 19, said plates extending in opposite directions from said actuator.
24. An electric brake actuator according to claim 19, said plates extending in the same direction from said actuator.
25. An electric brake actuator according to claim 18, said mounting means including a pair of spaced apart, substantially parallel arms, which are connected at opposite ends to said actuator and said vehicle respectively, said connection to at least one of said actuator and said vehicle being made along substantially a single axis which extends transverse to the direction of cable pull.
26. An electric brake actuator according to claim 25, at least one of said arms being rigidly fixed to at least one of said actuator and said vehicle, and being flexible in the direction of cable pull.
27. An electric brake actuator according to claim 25, at least one of said arms being hingedly connected to at least one of said actuator and said vehicle, and being pivotable about said single axis.
28. An electric brake actuator according to claim 25, including biasing means for biasing said arms to return said actuator from a shifted condition.

29. An electric brake actuator according to claim 18, said mounting means including a single arm connected at opposite ends to said actuator and said vehicle, said connection to at least one of said actuator and said vehicle being rigid and said arm being flexible in the direction of cable pull.
30. An electric brake actuator according to claim 18, said mounting means including a single arm connected at opposite ends to said actuator and said vehicle, said connection to at least one of said actuator and said vehicle being hinged and said arm being pivotable in the direction of cable pull.
31. An electric brake actuator according to claim 18, said mounting means including at least one arm, connected at opposite ends to said actuator and said vehicle respectively, at least one of said connections being a hinged connection, said hinged connection including a post about which said arm is hinged, said post being shiftable to facilitate manipulation of said actuator to relieve cable tension.
32. An electric brake actuator according to claim 31, said manipulation comprising rotation of said actuator.
33. An electric brake actuator according to claim 31, said post being received in an opening eccentrically formed in a bush and said bush being received in an opening formed in an end of said arm, each of said openings being parallel axially, said post being fixed at each of opposite ends thereof relative to said arm to hingedly secure said arm to at least one said actuator and said vehicle, said bush being rotatable to shift said eccentric opening and said arm to facilitate cable tension reduction.
34. An electric brake actuator according to claim 33, said bush including a locking lever formed as a channel to accept an upper edge of said arm and so to prevent rotation of said bush,

said lever being liftable to lift said channel from said upper edge, to facilitate rotation of said bush.

35. An electric brake actuator according to claim 34, said lever being liftable upon shifting said bolt in the lifting direction of said lever.

36. A vehicle brake system including a pair of brake assemblies respectively associated with a pair of wheels of a vehicle, a cable extending between said pair of brake assemblies and in engagement with an electric brake actuator according to claim 1, said actuator being operable by rotation of said rotatable member thereof to pull said cable on either side thereof to apply each of said pair of brake assemblies and thereafter to extend said cable to release said brake assemblies.